



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE

United States Patent and Trademark Office

Address: COMMISSIONER FOR PATENTS

P.O. Box 1450

Alexandria, Virginia 22313-1450

www.uspto.gov

| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
|-----------------|-------------|----------------------|---------------------|------------------|
|-----------------|-------------|----------------------|---------------------|------------------|

10/590,015

08/21/2006

Miwa Koshijima

062917

6754

38834

7590

10/14/2008

WESTERMAN, HATTORI, DANIELS & ADRIAN, LLP

1250 CONNECTICUT AVENUE, NW

SUITE 700

WASHINGTON, DC 20036

EXAMINER

MAPA, MICHAEL Y

ART UNIT

PAPER NUMBER

2617

MAIL DATE

DELIVERY MODE

10/14/2008

PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary

Application No.

10/590,015

Applicant(s)

KOSHIIJIMA ET AL.

Examiner

Michael Mapa

Art Unit

2617

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 21 August 2006.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-7, 9 and 10 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-7, 9 and 10 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 21 August 2006 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☒ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO/SF/08)
Paper No(s)/Mail Date _____
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date _____
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: _____

DETAILED ACTION

Information Disclosure Statement

1. The information disclosure statement (IDS) submitted on 08/21/06 & 03/04/08 has been considered by the examiner.

Claim Rejections - 35 USC § 101

2. 35 U.S.C. 101 reads as follows:

Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

Claim 10 is rejected under 35 U.S.C. 101 because the claimed invention is directed to non-statutory subject matter. Regarding claim 10, the applicant has claimed an alarm output program which does not provide tangibility and is directed towards non-statutory subject matter and is therefore ineligible for patenting. The examiner suggests the applicant change the claim to incorporate "a computer readable medium storing an alarm output program". For the purpose of the examination and the rejection provided below, the examiner will assume that claim 10 is written as suggested. Appropriate correction is required.

Claim Rejections - 35 USC § 103

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the

invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. Claims 1, 3, 5-7 and 9-10 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kloborg (US Patent Publication 2003/0125075 herein after referenced as Kloborg) in view of Lelievre et al. (US Patent Publication 2003/0040272 herein after referenced as Lelievre).

Regarding claim 1, Kloborg discloses "A mobile communication terminal having an alarm function comprising: a receiving unit operable to receive a broadcast;" (Paragraph [0026] of Kloborg, wherein Kloborg discloses the mobile phone having a programmable alarm clock menu and a radio tuner/receiver). Kloborg discloses "a control unit operable to (a) cause the receiving unit to start receiving a preset broadcast at a predetermined time" (Paragraph [0026] of Kloborg, wherein Kloborg discloses the mobile phone menu comprising a programmable alarm clock for activating the selected source for the audio signal when the preset alarm time is reached, therefore a control unit). Kloborg discloses "an output unit operable to output the selected broadcast at the alarm set time" (Paragraph [0026] of Kloborg, wherein Kloborg discloses activating the selected source of the audio signal when the preset alarm time is reached, therefore an output unit).

Kloborg fails to disclose "a position information acquisition unit operable to acquire position information of the mobile communication terminal; a storage unit operable to store a plurality of pieces of broadcast station information that correspond to Zones; a determination unit operable to determine a zone to which the position

information belongs; a detection unit operable to detect a receiving intensity of the broadcast received by the receiving unit; a control unit operable to (b) cause the position information acquisition unit, when a receiving intensity of the preset broadcast detected by the detection unit is less than a prescribed value, to newly acquire position information, (c) read a piece of the broadcast station information that corresponds to a zone determined by the determination unit based on the newly acquired position information, (d) cause the receiving unit to receive a broadcast identified by the piece of the broadcast station information, (e) select a broadcast having a receiving intensity of no less than the prescribed value;"

In a related field of endeavor, Lelievre discloses "a position information acquisition unit operable to acquire position information of the mobile communication terminal;" (Fig. 2 & Paragraph [0038] of Lelievre, wherein Lelievre discloses GPS module 112). Lelievre discloses "a storage unit operable to store a plurality of pieces of broadcast station information that correspond to Zones;" (Fig. 4 & Paragraph [0044] of Lelievre, wherein Lelievre discloses local database having recorded information of broadcast stations). Lelievre discloses "a determination unit operable to determine a zone to which the position information belongs;" (Fig. 7 & Paragraph [0053] of Lelievre, wherein Lelievre discloses obtaining the present location of the radio and retrieving updated tuning information from the local database containing information on broadcast stations such as program content, schedule and field strength boundaries). Lelievre discloses "a detection unit operable to detect a receiving intensity of the broadcast received by the receiving unit;" (Fig. 7 & Paragraph [0051] of Lelievre, wherein Lelievre

discloses determining whether the quality of the signal received from the selected radio station is adequate, therefore a detection unit). Lelievre discloses "before an alarm set time" (Paragraph [0043], wherein Lelievre discloses an audio message is played in the event that no tuning information can be supplied that satisfies the pre-designated format). Lelievre discloses "cause the position information acquisition unit, when a receiving intensity of the preset broadcast detected by the detection unit is less than a prescribed value, to newly acquire position information," (Paragraph [0053] of Lelievre, wherein Lelievre discloses obtaining the present location from the location information resource when the quality of the signal is not acceptable, therefore a prescribed value). Lelievre discloses "read a piece of the broadcast station information that corresponds to a zone determined by the determination unit based on the newly acquired position information," (Paragraph [0053] of Lelievre). Lelievre discloses "cause the receiving unit to receive a broadcast identified by the piece of the broadcast station information," (Paragraph [0053] of Lelievre). Lelievre discloses "select a broadcast having a receiving intensity of no less than the prescribed value;" (Paragraph [0054] of Lelievre).

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the invention of Klovborg to incorporate the teachings and method of location-based selection of radio content sources as taught by Lelievre. The motivation for the combination is to increase marketability and revenue by providing the consumers with the incentive to purchase such optional location information resources (Paragraph [0007] of Lelievre).

Regarding claim 3, Klovborg in view of Lelievre discloses "The mobile communication terminal of Claim 1, wherein the position information acquisition unit acquires the position information of the mobile communication terminal using a GPS." (Fig. 2 & Paragraph [0038] of Lelievre, wherein Lelievre discloses a GPS module).

Regarding claim 5, Klovborg in view of Lelievre discloses "The mobile communication terminal of Claim 1, wherein the broadcast station information corresponds to one or more zones" (Paragraph [0044] of Lelievre, wherein Lelievre discloses the database having a list of radio coverage zones).

Regarding claim 6, Klovborg in view of Lelievre discloses "The mobile communication terminal of Claim 1, wherein the detection unit detects an electric field intensity of a receiving electric wave of the broadcast received by the receiving unit, and the prescribed value is a value of an electric field intensity indicates that the broadcast is clearly receivable. (Fig. 7 & Paragraph [0051] of Lelievre, wherein Lelievre discloses a determination of whether the quality of the signal received is adequate to produce an acceptable output).

Regarding claim 7, Klovborg in view of Lelievre discloses "The mobile communication terminal of Claim 1, wherein the control unit, when the broadcast having the receiving intensity of no less than the prescribed value is not found, causes the output unit to output a built-in alarm sound." (Paragraph [0043] of Lelievre, wherein Lelievre discloses an audio message may be played when no tuning information is found that satisfies the pre-designated format).

Regarding claims 9 and 10, Kloborg in view of Lelievre discloses "An alarm output method in a mobile communication terminal having an alarm function" and "a computer readable medium storing an alarm output program that shows a processing procedure for causing a computer of a mobile communication terminal to output an alarm, comprising the steps of:" (Paragraph [0063] of Lelievre, wherein Lelievre discloses a storage medium wherein the program is loaded into and executed by a machine becomes an apparatus for practicing the invention). Kloborg in view of Lelievre discloses "receiving a preset broadcast;" (Paragraph [0026] of Kloborg). Kloborg in view of Lelievre discloses "detecting an electric field intensity of a receiving electric wave of the received preset broadcast; judging whether the electric field intensity detected in the electric field intensity detecting step is no less than a prescribed value" (Paragraph [0051] of Lelievre). Kloborg in view of Lelievre discloses "at a predetermined time before an alarm set time;" (Paragraph [0043] of Lelievre, wherein Lelievre discloses playing an audio message when no tuning information can be supplied that satisfies the pre-designated format). Kloborg in view of Lelievre discloses "acquiring, when the electric field intensity is judged to be less than the prescribed value in the electric field intensity judging step, position information of the mobile communication terminal;" (Paragraph [0053] of Lelievre, wherein Lelievre discloses the present location is obtained from the location information resource if the determination made is that the quality is not acceptable). Kloborg in view of Lelievre discloses "determining, based on the position information acquired in the position information acquiring step, a zone to which the position information belongs; reading,

based on the zone determined in the zone determining step, a piece of broadcast station information that corresponds to the zone;" (Paragraph [0053] of Lelievre, wherein Lelievre discloses updated tuning is received from the local database, wherein the database includes information such as programming format, content, schedule and field strength boundaries of a plurality of broadcast stations). Klovborg in view of Lelievre discloses "selecting, by sequentially receiving a broadcast included in the broadcast station information read in the broadcast station information reading step, a broadcast of a receiving electric wave having an electric field intensity judged to be no less than the prescribed value in the electric field intensity judging step;" (Paragraph [0053] - [0054] of Lelievre, wherein Lelievre discloses the database to have a list of broadcast stations that have nominal field strength greater than some predetermined threshold value or field strength and the process continues with the updated tuning information). Klovborg in view of Lelievre discloses "outputting the broadcast selected in the broadcast selecting step, at the alarm set time" (Paragraph [0026] of Klovborg).

5. Claim 2 is rejected under 35 U.S.C. 103(a) as being unpatentable over Klovborg (US Patent Publication 2003/0125075 herein after referenced as Klovborg) in view of Lelievre et al. (US Patent Publication 2003/0040272 herein after referenced as Lelievre) and further in view of Itoh et al (US Patent Publication 2004/0259495 herein after referenced as Itoh).

Regarding claim 2, Klovborg in view of Lelievre discloses "The mobile communication terminal of Claim 1." In addition, the combination discloses the

database having a list of broadcast stations that have a nominal field strength greater than some predetermined threshold value (Paragraph [0054 of Lelievre). However, the combination fails to disclose “wherein the control unit causes the receiving unit to receive the broadcast having a highest receiving intensity detected by the detection unit among the broadcasts identified by the piece of the broadcast station information.”

In a related field of endeavor, Itoh discloses “wherein the control unit causes the receiving unit to receive the broadcast having a highest receiving intensity detected by the detection unit among the broadcasts identified by the piece of the broadcast station information” (Paragraph [0004] of Itoh, wherein Itoh discloses the reception terminal unit is to access a base station that is the highest in signal reception level among a plurality of base stations.)

Therefore it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the invention of Klovborg in view of Lelievre to incorporate the method of selecting the highest signal reception level as taught by Itoh. The motivation for the combination is to provide the user with the cleanest and clearest signal available.

6. Claim 4 is rejected under 35 U.S.C. 103(a) as being unpatentable over Klovborg (US Patent Publication 2003/0125075 herein after referenced as Klovborg) in view of Lelievre et al. (US Patent Publication 2003/0040272 herein after referenced as Lelievre) and further in view of De Verteuil (US Patent Publication 2003/0148771 herein after referenced as De Verteuil).

Regarding claim 4, Klovborg in view of Lelievre discloses "The mobile communication terminal of Claim 1." Klovborg in view of Lelievre fails to disclose "wherein the position information acquisition unit acquires position information of a base station by communicating with the base station, and defines the position information as the position information of the mobile communication terminal."

In a related field of endeavor, De Verteuil discloses "wherein the position information acquisition unit acquires position information of a base station by communicating with the base station, and defines the position information as the position information of the mobile communication terminal." (Paragraph [0051] – [0053] of De Verteuil, wherein De Verteuil discloses using cell ID information for monitoring the location, wherein the cell ID information is converted into geographic coordinates and compared with a location of interest.)

Therefore it would have been obvious for one of ordinary skill in the art to modify the invention of Klovborg in view of Lelievre to incorporate the method of using cell ID information position determination technique as taught by De Verteuil. The reason for the combination is to enhance efficiency by minimizing high resource position determination systems (Paragraph [0051] of De Verteuil).

Conclusion

7. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Michael Mapa whose telephone number is (571)270-

5540. The examiner can normally be reached on MONDAY TO THURSDAY 8:00AM - 5:00PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Nick Corsaro can be reached on (571)272-7876. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Michael Mapa/
Examiner, Art Unit 2617

/NICK CORSARO/
Supervisory Patent Examiner, Art Unit 2617